

CLAIMS:

1. A method for reducing the transmission requirements of a system for transmitting image data to a display device, the image data representing a plurality of pixels defining an image for display on the display device, the image data being transmitted in a data stream and being in a predetermined order of pixel components, the method comprising the steps of:

receiving the image data from the data stream; and

transforming the image data as it is received by selectively storing some of the image data in a memory for access by the display device and discarding other of the image data.

2. The method of claim 1, wherein said step of receiving the image data includes receiving a first data element corresponding to a line of the display at a first time, wherein said step of selectively storing the image data includes storing said first data element at a second time subsequent to said first time, and wherein said step of receiving further includes receiving a second data element corresponding to the same said line at a third time subsequent to said second time.

3. The method of claim 2, wherein said data element is a pixel.

4. The method of claim 2, wherein said data element is a pixel component.

5. The method of claim 1, wherein said step of receiving the image data includes receiving said first and second data elements consecutively.

6. The method of claim 5, wherein said data element is a pixel.

7. The method of claim 5, wherein said data element is a pixel component.

8. The method of claim 1, wherein said step of receiving the image data receives the

image data from a CODEC.

9. The method of claim 1, wherein said data stream comprises JPEG decoded block-interleaved data.

10. The method of claim 1, wherein said step of transforming the image data as it is received includes cropping the image.

11. The method of claim 1, wherein said step of transforming the image data as it is received includes scaling the image.

12. An apparatus for reducing the transmission requirements of a system for transmitting image data to a display device, the image data representing a plurality of pixels defining an image for display on the display device, the image data being transmitted in a data stream and being in a predetermined order of pixel components, comprising:

a receiving module adapted to receive the image data from the data stream; and

a transforming module adapted to transform the image data as it is received by selectively storing some of the image data in a memory for access by the display device and discarding other of the image data.

13. The apparatus of claim 12, wherein said receiving module is adapted to receive a first data element corresponding to a line of the display at a first time, wherein said transforming module is adapted to selectively store said first data element at a second time subsequent to said first time, and wherein said receiving module is further adapted to receive a second data element corresponding to the same said line at a third time subsequent to said second time.

14. The apparatus of claim 13, wherein said data element is a pixel.

15. The apparatus of claim 13, wherein said data element is a pixel component.

16. The apparatus of claim 12, wherein said receiving module is adapted to receive said first and second data elements consecutively.
17. The apparatus of claim 16, wherein said data element is a pixel.
18. The apparatus of claim 16, wherein said data element is a pixel component.
19. The apparatus of claim 12, wherein said receiving module is adapted to receive the image data from a CODEC.
20. The apparatus of claim 12, wherein said data stream comprises JPEG decoded block-interleaved data.
21. The apparatus of claim 12, wherein said transforming module is adapted to crop the image.
22. The apparatus of claim 12, wherein said transforming module is adapted scale the image.
23. The apparatus of claim 12, wherein said apparatus is embodied in a graphics controller.
24. A machine-readable medium embodying a program of instructions for execution by a machine to perform a method for reducing the transmission requirements of a system for transmitting image data to a display device, the image data representing a plurality of pixels defining an image for display on the display device, the image data being transmitted in a data stream and being in a predetermined order of pixel components, the method comprising the steps of:

receiving the image data from the data stream; and

transforming the image data as it is received by selectively storing some of the

image data in a memory for access by the display device and discarding other of the image data.

25. The machine-readable medium of claim 24, wherein said step of receiving the image data includes receiving a first data element corresponding to a line of the display at a first time, wherein said step of selectively storing the image data includes storing said first data element at a second time subsequent to said first time, and wherein said step of receiving further includes receiving a second data element corresponding to the same said line at a third time subsequent to said second time.

26. The machine-readable medium of claim 25, wherein said data element is a pixel.

27. The machine-readable medium of claim 25, wherein said data element is a pixel component.

28. The machine-readable medium of claim 24, wherein said step of receiving the image data includes receiving said first and second data elements consecutively.

29. The machine-readable medium of claim 28, wherein said data element is a pixel.

30. The machine-readable medium of claim 28, wherein said data element is a pixel component.

31. The machine-readable medium of claim 24, wherein said step of receiving the image data receives the image data from a CODEC.

32. The machine-readable medium of claim 24, wherein said data stream comprises JPEG decoded block-interleaved data.

33. The machine-readable medium of claim 24, wherein said step of transforming the image data as it is received includes cropping the image.

34. The machine-readable medium of claim 24, wherein said step of transforming the image data as it is received includes scaling the image.